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Improvement to babies' diapers

The subject of the present invention is a babies' diaper consisting of an entity formed of a layer of absorbent plastic 2 and of a sheet of plastic 1 taking the place of leakproof pants, characterized in that the sheet of plastic 1 is transparent or translucent and in that it comprises visual means 6 which are erased upon contact with water and urine and which, when erased 9, provide, from the outside, an indication that the baby is wet without there being a need to undo the diaper.

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IMPROVEMENT TO BABIES' DIAPERS

The subject of the present invention is an improvement made to babies' diapers.

The technical field of the invention is that of the industry involved in the production of sanitary protection items.

To keep children of a tender age clean, use is commonly made nowadays of diapers which offer the mother or the nanny great advantages, given the practicality of such items.

The subject of the invention is an improvement to diapers for babes-in-arms, so as to make the work of the mother or of the nanny appreciably easier and make the baby more comfortable.

The objective of the present invention is a babies' diaper which, when worn by the child, allows the mother or the nanny to see directly, and without undoing the diaper, whether the baby is wet. This objective is achieved by the babies' diaper consisting of an entity formed of a layer of absorbent material and of a sheet of plastic taking the place of leakproof pants, characterized in that the sheet of plastic is transparent or translucent and in that it comprises visual means which are erased upon contact with water and urine and which, when erased, provide, from the outside, an indication that the baby is wet without there being a need to undo the diaper.

In one embodiment, the sheet of plastic comprises, on its interior side situated on the same side as the absorbent layer, decorative patterns or any other inscriptions made with a colored product such as an ink or any other similar product soluble in water and in urine so that when the baby is wet said patterns or inscriptions are erased.

In another embodiment, the sheet bears, in addition to said decorative patterns or inscriptions that can be erased with water and with urine, other decorative patterns or any other inscriptions produced with a colored product such as an ink or any other similar product which is stable in water and in urine. Said patterns or inscriptions which are stable in water or in urine are printed with equal preference on the interior side or the exterior side of the sheet of plastic.

In one embodiment, said patterns or inscriptions are distributed over the entirety of the surface of the sheet of plastic.

In another embodiment, said patterns or inscriptions are distributed over an area corresponding to the area covered by the absorbent layer.

The result of the invention is a babies' diaper which allows the mother or the nanny to see, without undoing the diaper, whether the baby is wet.

The advantages and characteristics of the invention will become apparent on reading the following description of one embodiment of a diaper with reference to the appended drawing, in which:

- the single figure is a view from above of a diaper depicted laid out flat from the side which bears the absorbent lining, and a part of said lining of which has been omitted in order to show the visual means according to the invention.

In the known way, a diaper is made up of a sheet of plastic 1, which is cut out and at the sides has two wide notches so that the sheet 1 adopts the shape of a double T. This sheet thus comprises a longitudinal central strip 1a which, at its ends, has lateral flaps 1b/1c/1d/1e, for example of trapezoidal outline. The central part 1a

comprises an absorbent lining forming a layer 2, consisting of wadding, for example of cellulose or any other similar absorbent material. This lining 2, which is fairly thick, has an ovalized outline and at its ends has lateral extensions 2a/2b/2c/2d of lesser thickness which adopt the general shape of the flaps 1b/1c/1d/1e. These extensions are set back from the edges which delimit the ends of the strip 1a and of said flaps. The absorbent lining 2 is inserted between the sheet of plastic 1 and a film of nonwoven fibers, for example cellulose fibers 3 or any other fibers, which covers the sheet 1 and which is fixed to the latter for example by bonding of its peripheral edge which extends around the lining 2 and the extensions 2a/2b/2c/2d and on the area lying between said lining, said extensions and the periphery of the sheet of plastic 1.

The diaper may or may not have elastic running along the lateral edges 1a₁/1a₂ of the central strip 1a to form gathering intended to fit snugly around the thighs of the babe-in-arms.

The flaps 1d/1e comprise self-adhesive strips 4/5 which are intended to be applied to the exterior side of the flaps 1b/1c when the nappy pants are formed.

According to the invention, the sheet of plastic 1, for example made of transparent or translucent polyethylene bears, on its interior side 1f, patterns 6 which are printed with an ink which is soluble in water and in urine or any other similar product such as a dye or a paint. These patterns may adopt any shape, for example small circles 6, or may alternatively consist of inscriptions, designs or the like.

These patterns 6 may be associated with other patterns printed in an ink which is stable in water and in urine or any other equivalent product such as a dye or a paint.

Figure 1 illustrates a collection of indelible stylized patterns depicting butterflies 7 and flowers 8. These flowers have petals 8a protruding from the periphery of circles 8b. The circle 6 produced with an ink that is soluble in urine, is printed inside the circle 8a and is a different color to the indelible patterns 7/8. For example, the circles 6 are yellow whereas the other patterns 7/8 are blue. This color combination is not, however, restrictive, and several other combinations could be produced.

When the child is wet, the large amount of moisture present in the layer where the urine has collected in the leakproof nappy pants, causes the circular patterns 6 to become erased, as depicted at 9. The erasing of said patterns 6 indicates that the child needs to be changed.

As the sheet of plastic 1 is transparent or translucent, the patterns 6/7/8 are thus visible from the outside, and the indication that the baby is wet is given without there being a need to undo the diaper as has to be done in the case of the diapers currently used.

Of course, the indelible patterns 7/8 may be printed with equal preference on the interior or exterior side of the sheet of plastic

CLAIMS

1. Babies' diaper consisting of an entity formed of a layer of absorbent plastic (2) and of a sheet of plastic (1) taking the place of leakproof pants, characterized in that the sheet of plastic (1) is transparent or translucent and in that it comprises visual means which are erased upon contact with water and with urine (6) and which, when

erased (9), provide, from the outside, an indication that the baby is wet without there being a need to undo the diaper.

2. Diaper according to claim 1, characterized in that the sheet of plastic (1) comprises, on its interior side (1f) situated on the same side as the absorbent layer (2), decorative patterns (6) or any other inscriptions made with a colored product such as an ink or any other similar product soluble in water and in urine so that when the baby is wet said patterns or inscriptions (6) are erased.

3. Diaper according to either one of claims 1 and 2, characterized in that the sheet of plastic (1) bears, in addition to said decorative patterns or inscriptions (6) that can be erased with water and with urine, other decorative patterns (7/8) or any other inscriptions produced with a colored product such as an ink or any other similar product which is stable in water and in urine.

4. Diaper according to claim 3, characterized in that said patterns or inscriptions which are stable in water or in urine (7/8) are printed with equal preference on the interior side or the exterior side of the sheet of plastic (1).

5. Diaper according to any one of claims 1 to 4, characterized in that said patterns (6/7/8) or inscriptions are distributed over the entirety of the surface of the sheet of plastic (1).

6. Diaper according to any one of claims 1 to 4, characterized in that said patterns (6/7/8) or inscriptions are distributed over an area corresponding to the area covered by the absorbent layer (2).